

# 6

PCT09

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/719,554

DATE: 08/01/2001  
TIME: 18:46:40

Input Set : A:\es.txt  
Output Set: N:\CRF3\08012001\I719554.raw

PS

3 <110> APPLICANT: ALLIEL, Patrick  
4 PERIN, Jean-Pierre  
5 RIEGER, Francois  
7 <120> TITLE OF INVENTION: NUCLEIC ACID SEQUENCE AND DEDUCED PROTEIN SEQUENCE FAMILY  
WITH HUMAN  
8 ENDOGENOUS RETROVIRAL MOTIFS  
10 <130> FILE REFERENCE: 200936US0PCT  
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/719,554  
C--> 12 <141> CURRENT FILING DATE: 2001-12-26  
12 <150> PRIOR APPLICATION NUMBER: PCT/FR99/01513  
13 <151> PRIOR FILING DATE: 1999-06-25  
15 <160> NUMBER OF SEQ ID NOS: 122  
17 <170> SOFTWARE: PatentIn version 3.1  
19 <210> SEQ ID NO: 1  
20 <211> LENGTH: 2599  
21 <212> TYPE: DNA  
22 <213> ORGANISM: Homo sapiens  
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| 27 | gaagactggc  | aactgatttt  | accacaagc   | ccaaacctca  | gggatttcag | tatctactag  | 120  |
| 29 | tctgggtaga  | tactttcacg  | ggttgggcag  | aggccttccc  | ctgtaggaca | gaaaaggccc  | 180  |
| 31 | aagaggtaat  | aaaggcacta  | gttcatgaaa  | taattcccag  | attcggactt | ccccgaggct  | 240  |
| 33 | tacagagtga  | caatagccct  | gctttccagg  | ccacagtaac  | ccagggagta | tcccaggcgt  | 300  |
| 35 | taggtatacg  | atatcactta  | cactgcgcct  | gaaggccaca  | gtcctcaggg | aaggctcgaga | 360  |
| 37 | aatgaatga   | aacactcaaa  | ggacatctaa  | aaaagcaaac  | ccaggaaacc | cacctcacat  | 420  |
| 39 | ggcctgctct  | gttgccctata | gccttaaaaa  | gaatctgcaa  | ctttcccca  | aaagcaggac  | 480  |
| 41 | ttagcccata  | cgaaatgctg  | tatggaaggc  | ccttcataac  | caatgacctt | gtgcttgacc  | 540  |
| 43 | caagacagcc  | aacttagttg  | cagacatcac  | ctccttagcc  | aaatatcaac | aagttcttaa  | 600  |
| 45 | aacattacaa  | ggaacctatc  | cctgagaaga  | gggaaaagaa  | ctattccacc | cttgtgacat  | 660  |
| 47 | ggtattagtc  | aagtcccttc  | cctctaattc  | cccatcccta  | gatacatcct | gggaaggacc  | 720  |
| 49 | ctacccagtc  | attttatcta  | ccccaaactgc | ggttaaagtgc | gctggagtgc | agtcttgat   | 780  |
| 51 | acatcacact  | tgagtcaaat  | cctggatact  | gccaaaggaa  | cctgaaaatc | caggagacaa  | 840  |
| 53 | cgctagctat  | tcctgtgaac  | ctctagagga  | tttgcgcctg  | ctcttcaaac | aacaaccagg  | 900  |
| 55 | aggaaagtaa  | ctaaaatcat  | aaatcccat   | ggccctccct  | tatcataatt | ttctctttac  | 960  |
| 57 | tgttctttta  | ccctctttca  | ctctcactgc  | acccctccca  | tgccgctgta | tgaccagtag  | 1020 |
| 59 | ctcccccttac | caagagtttc  | tatggagaat  | gcagcgtccc  | ggaaatattg | atgccccatc  | 1080 |
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| 63 | ctgctatcac  | tctgccactc  | tttgcatgca  | tgcaataact  | cattattgga | caggaaaaat  | 1200 |
| 65 | gattaatcct  | agttgtcctg  | gaggacttgc  | agtcactgtc  | tggttgactt | acttcaccca  | 1260 |
| 67 | aactggatat  | tctgatggg   | gtggagttca  | agatcaggca  | agagaaaaac | atgtaaaaga  | 1320 |
| 69 | agtaatctcc  | caactcaccc  | gggtacatgc  | cacctctagc  | ccctacaaag | gactagatct  | 1380 |
| 71 | ctcaaaacta  | catgaaaccc  | tccgtaccca  | tactgcctgc  | gtaagcctat | ttaataccac  | 1440 |
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| 75 | cctgaacttc  | aggccatatg  | tttcaatccc  | tgtacctgaa  | caatggaaca | acttcagcac  | 1560 |
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128 tgggtccaaa ggagatagac aaaagggtaa acagtgaacc aaagagtgcc aatattcccc 300
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| 181 | atcatctatt | gcctgagagc  | acagcaggag  | ggacaacaat  | cgggatataa | acccaggcat  | 300  |
| 183 | tcgagctggc | aacagcagcc  | cccctttggg  | tcccttccct  | ttgtatggga | gctgttttca  | 360  |
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| 195 | acgggttcta | atagaactat  | aacacttacc  | acatggccca  | agattccatt | ccttgggaatc | 720  |
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| 211 | cctgaactcc | cggcagtagc  | cggttgagat  | catggtgtag  | ccagaagtct | caacagtcgc  | 1200 |
| 213 | ccatgcatgc | acccctatct  | ttccttctga  | cccatacctc  | ctgggtccca | accacaactt  | 1260 |
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| 263 | aggcaatggt | gggcacgctg  | gtaaaggacc  | actagaatcc  | agcagcctgg | acccctttct  | 2760 |
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| 359 | gattcccagg  | tatggcgaaa | tagccaggtc  | attaaataca  | ctaattaagg | aaactcagaa | 5640 |
| 361 | agccaatacc  | catttagtaa | gatggacaac  | tgaagtagaa  | gtggccttcc | aggccctaac | 5700 |
| 363 | ccaagcccca  | gtgttaagtt | tgccaacagg  | gcaagacttt  | tcttcatatg | tcacagaaaa | 5760 |
| 365 | aacaggaata  | gctctaggag | tccttacaca  | gatccgaggg  | atgagcttgc | aacctgtggc | 5820 |
| 367 | atacctgact  | aaggaaattg | atgtagtggc  | aaagggttga  | cctcattgtt | tacgggtagt | 5880 |
| 369 | ggtggcagta  | gcagtcttag | tatctgaagc  | agttaaaata  | atacagggaa | gagatcttac | 5940 |
| 371 | tgtgtggaca  | tctcatgatg | tgaatggcat  | actcactgct  | aaaggagact | tgtggctgtc | 6000 |

## RAW SEQUENCE LISTING

DATE: 08/01/2001

PATENT APPLICATION: US/09/719,554

TIME: 18:46:40

Input Set : A:\es.txt

Output Set: N:\CRF3\08012001\I719554.raw

```

373 agacaactgt ttacttaaat gtcaggctct attacttgaa gggccagtgc tgcgactgtg 6060
375 cacttgatgca actcttaacc cagccacatt tcttccagac aatgaagaaa agataaaaaca 6120
377 taactgtcaa caagtaattt ctcaaaccta tgccactcga ggggaccttt tagaggttcc 6180
379 tttgactgat cccgacctca acttgatatac tgatggaagt tcctttgtag aaaaaggact 6240
381 tcgaaaagtg gggatgcatg tggtcagtga taatggaata cttgaaagta atccccctcac 6300
383 tccaggaact agtgctcagc tagcagaact aatagccctc acttgggcac tagaattagg 6360
385 agaagaaaaa agggcaaata tatatacaga ctctaaatat gcttacctag tctccatgc 6420
387 ccatgcagca atatggaaag aaagggaatt cctaacttct gagagaacac ctatcaaaaca 6480
389 tcaggaagcc attaggaaat tattattggc tgtacagaaa cctaaagagg tggcagtctt 6540
391 acactgccgg ggtcatcaga aaggaaagga aagggaaata gaagagaact gccaaagcaga 6600
393 tattgaagcc aaaagagctg caaggcagga ccctccatta gaaatgctta taaaacaacc 6660
395 cctagtatag ggtaatcccc tccgggaaac caagccccag tactcagcag gagaacacaga 6720
397 atggggaacc tcacgaggac agttttctcc cctcgggacg gctagccact gaagaaggga 6780
399 aaatactttt gcctgcaact atccaatgga aattacttaa aacccttcat caaacctttc 6840
401 acttaggcat cgatagcacc catcagatgg ccaaatcatt atttactgga ccaggccttt 6900
403 tcaaaactat caagcagata gtcagggcct gtgaagtgtg ccagagaaat aatccccctgc 6960
405 cttatcgcca agctccttca ggagaacaaa gaacaggcca ttaccctgga gaagactggc 7020
407 aactgatttt acccacaagc ccaaacctca gggatttcag tatctactag tctgggtaga 7080
409 tactttcacg gggtgggcag aggccttccc ctgtaggaca gaaaaggccc aagaggtaat 7140
411 aaaggcacta gttcatgaaa taattcccag attcggactt ccccgaggct tacagagtga 7200
413 caatagccct gctttccagg ccacagtaac ccagggagta tcccaggcgt taggtatacg 7260
415 atatcactta cactgcgcct gaaggccaca gtccctcagg aaggtcgaga aaatgaatga 7320
417 aacactcaaa ggacatctaa aaaagcaaac ccaggaaacc cacctcacat ggctgctct 7380
419 gttgcctata gccttaaaaa gaatctgcaa ctttcccca aaagcaggac ttagcccata 7440
421 cgaaatgctg tatggaaggc ccttcataac caatgacctt gtgcttgacc caagacagcc 7500
423 aacttagttg cagacatcac ctctctagcc aaatatcaac aagttcttaa aacattacaa 7560
425 ggaacctatc cctgagaaga gggaaaagaa ctattccacc cttgtgacat ggtattagtc 7620
427 aagtcctctt cctctaattc cccatcccta gatatacctt ggggaaggacc ctacccagtc 7680
429 attttatcta ccccaactgc ggttaaagtg gctggagtgg agtcttggtt acatcacact 7740
431 tgagtcaaat cctggatact gccaaaggaa cctgaaaatc caggagacaa cgctagctat 7800
433 tcctgtgaac ctctagagga tttgcgcctg ctcttcaaac aacaaccagg aggaaagtaa 7860
435 ctaaaatcat aaatccccat ggccctccct tatcatattt ttctctttac tgttctttta 7920
437 ccctctttca ctctcactgc accccctcca tgccgctgta tgaccagtag ctccccttac 7980
439 caagagtttc tatggagaat gcagcgtccc ggaaatattg atgccccatc gtataggagt 8040
441 ctttctaagg gaacccccac cttcactgcc cacaccata tgccccgcaa ctgctatcac 8100
443 tctgccactc tttgcatgca tgcaataact cattattgga caggaaaaat gattaatcct 8160
445 agttgtcctg gaggacttgg agtcaactgtc tgttggactt acttcaccca aactggtatg 8220
447 tctgatgggg gtggagtcca agatcaggca agagaaaaaac atgtaaaaga agtaatctcc 8280
449 caactcaccg ggttacatgg cacctctagc ccctacaaag gactagatct ctcaaaaacta 8340
451 catgaaaccc tccgtaccca tactcgctcg gtaagcctat ttaataccac cctcactggg 8400
453 ctccatgagg tctcggccca aaaccctact aactgttgga tatgcctccc cctgaacttc 8460
455 aggccatatg tttcaatccc tgtacctgaa caatggaaca acttcagcac agaaataaac 8520
457 accacttccg ttttagtagg acctcttggt tccaatctgg aaataacca tacctcaaac 8580
459 ctacactgtg taaaatttag caatactaca tacacaacca actcccaatg catcaggtgg 8640
461 gtaacctcct ccacacaaat agtctgccta cctcaggaa tattttttgt ctgtggtagc 8700
463 tcagcctatc gttgtttgaa tggctcttca gaatctatgt gcttctcttc attcttagtg 8760
465 cccctatga ccatctacac tgaacaagat ttatacagtt atgtcatatc taagccccgc 8820
467 aacaaaagag taccattctt tccctttgtt ataggagcag gagtgtagg tgcaactagg 8880
469 actggcattg gcggtatcac aacctctact cagttctact acaaaactatc tcaagaacta 8940

```

Use of n and/or Xaa has been detected in the Sequence Listing.

Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/719,554

DATE: 08/01/2001

TIME: 18:46:41

Input Set : A:\es.txt

Output Set: N:\CRF3\08012001\I719554.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:2088 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35

L:2104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35

L:2112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35

L:2248 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35

L:2252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35

L:2303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36

L:2319 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36

L:2339 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36

L:2343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36

L:2379 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36

L:2387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36

L:2663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58

L:2679 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58

L:2699 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58

L:2703 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58

L:2739 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58

L:2747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58

L:2751 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58

L:2759 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58